

## **CLAIMS**

1. A water management and leak detection for hot water tanks comprising:  
a rigid secondary container to contain a hot water tank consisting of two halves mated  
together around the said water tank;

5 attachment means to attach the two halves together;  
access hatches to access heating elements panels;  
a bail pump and a water sensor.

2. A water management and leak detection for hot water tanks comprising:

10 a soft secondary container to contain a hot water tank ;  
a non metallic sealing zipper to open said soft secondary container;  
a bail pump and a water sensor.

3. A water management and leak detection for hot water tanks comprising:

15 a hybrid secondary container having a rigid bottom basin and a skirt extending  
upwardly therefrom and a tightening belt at the top of the said skirt;  
a bail pump and a water sensor.

4. A water management and leak detection for hot water tanks comprising:

20 a modular rigid container comprised of at least one but preferably a plurality of slightly  
conical modules;  
each said conical modules shaped so as to sealably wedge into one another to create  
said sealed modular rigid container.

5. A water management and leak detection for hot water tanks as in claims 1, 2, 3 and 4 comprising:

means for controlling water and heating by way of an electrical circuit having electromechanical and electric components.

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6. A water management and leak detection for hot water tanks as in claim 5 wherein said means for controlling water and heating comprising:

static relays;

a manual switch;

10 a main programmable timer;

a remote control receiver;

electromechanical valve;

an alarm.

15 7. A water management and leak detection for hot water tanks as in claim 6 further comprising:

a water control relay having a water control timer.

20 8. A water management and leak detection for hot water tanks as in claim 6 further comprising:

motion detectors;

motion detector timer.

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9. A water management and leak detection for hot water tanks as in claim 6 further comprising:

a water control relay having a water control timer.

5 10. A water management and leak detection for hot water tanks as in claim 6 further comprising:

a water control relay having a water control timer;

a main water line valve to control a main water line having a main water line timer.

10 11. A water management and leak detection for hot water tanks as in claim 6 further comprising:

a main water line valve to control a main water line having a main water line timer;

said main water line timer being positioned to override said main programmable timer.

15 12. A water management and leak detection for hot water tanks as in claim 6 further comprising:

a main water line valve to control a main water line having a main water line timer;

said main water line timer being positioned to be slave to said main programmable timer.

20 13. A water management and leak detection for hot water tanks as in claim 6 further comprising:

an additional timer to control said main water line valve.

14. A water management and leak detection for hot water tanks as in claim 6 further comprising:

a motion detector timer to control said main water line timer.

5 15. A water management and leak detection for hot water tanks as in claims 6-14 wherein said means for controlling water and heating comprising:

said motion detectors and said motion detector timers being in an open loop.

10 16. A water management and leak detection for hot water tanks as in claims 6-14 wherein said means for controlling water and heating comprising:

said motion detectors and said motion detector timers being in an closed loop.

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